

EPPEL', B.S. (Moskva); BOL'SEN, Ye.M. (Kiyev); LOPOVOK, L.M. (Khmel'nitskiy)

"Collection of trigonometric problems". A.I. and N.I. Khudobin. Reviewed by B.S.Eppel', E.M.Bol'sen, L.M.Lopovok. Mat. v shkole no.6: 77-81 M-D '55. (MLRA 9:2
(Trigonometry--Problems, exercises, etc.) (Khudobin, A.I.) (Khudobin, N.I.)

LOPOVOK, Lev Mikhaylovich; KOPERSAK, G.D.,redaktor; MONZHERAN, V.F.,
tekhnicheskii redaktor

[Practices in teaching mathematics in secondary schools]
Z dosvidu vykladannia matematyky v serednii shkoli. Kyiv,
Derzh. uchbovo-pedagog. vyd-vo "Radians'ka shkola," 1957.
202 p. (MLRA 10:5)
(Mathematics--Study and teaching)

LOPOVOK, L.M. (Khmelnitsk, U. R. S. S.)

Propounded problems; 5202. Gaz mat B 13 no.3:174 Mr '62.

LOPOVOK, L.M. (Khmel'nitskiy, SSSR); KOLEV, N. [translator]

Studying the space geometric points in schools. Mat i fiz Bulg
5 no.3:24-32 My-Je '62.

LOPOVOK, L.M. (Khmel'nitskiy, SSSR); KOLEV, N. [translator]

Using the materials of the 22d Congress of the CPSS in lessons
on mathematics. Mat i fiz Bulg 5 no.4:23-29 Jl-Ag '62.

LOPOVOK, L. M. (gr. Lugansk, SSSR)

Geometric transformations in secondary schools. Mat i fiz
Bulg 7 no, 2: 18-24 '64,

LOPOVOK, Lev M. (g. Lugansk, SSSR); PETROV, K. [translator]

Mathematical dictations. Mat i fiz Bulg 7 no. 1:
13-17 Ja-F '64.

LOPOVOK, L.M. (Lugansk, SSSR)

Logical problems in secondary schools. Mat 1 fiz Bulg 8 no.1:
28-33 Ja-F '65.

21.7000

77255
SOV/89-8-2-20/30

AUTHOR: Lopovok, T. A.

TITLE: A Mobile Neutron Multiplier. Letter to the Editor

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 2, pp 158-159 (USSR)

ABSTRACT: The method of activation analysis is one of the most efficient methods for prospecting and surveying purposes. To develop the method further for on-the-spot analysis of rocks, one needs relatively strong neutron sources. The Institute of Atomic Energy AS USSR (Institut atomnoy energii AN SSSR) in cooperation with the Institute of Oil AS USSR (Institut nefti AN SSSR) developed and built in 1958 a small mobile unit under the name of neutron multiplier. It is a small-in-size mobile uranium-water heterogeneous system mounted on a 4-ton ZIS-151 truck. Maximum multiplication factor of the unit is $K_{eff} = 0.997$. Primary neutrons originate in an approximately $5 \cdot 10^7$ neutron/sec strong polonium-beryllium source. 10% enriched uranium serves as nuclear fuel. It is distributed in vertical aluminum containers, each containing

Card 1/5

A Mobile Neutron Multiplier. Letter to
the Editor

77255

SOV/89-8-2-20/30

approximately 7.2 gm U^{235} . Natural water serves as moderator (see Fig. 2). The active region of the multiplier is cylindrical, approximately 42 cm in diameter and about 45 cm high. Optimal lattice spacing is 18 mm, and geometry of the active region makes it safe in case of auto accident. The isotope U^{235} content is approximately 2.8 kgm. The multiplier has five experimental channels, each 52 mm in diameter and located in the reflector. The (n, γ) and (n, p) measurements can be performed in all channels simultaneously. One channel contains a neutron converter consisting of a thin-walled hollow cylinder made of enriched uranium. One of the channels is cadmium-coated on the inside. General useful volume of the channels is approximately 2 liters with a 3 to $4 \cdot 10^6$ neutron/sec flux. The intensity of flux is controlled by displacing boron carbide regulator sticks located in the lower half of the polonium-beryllium source. When working at maximum power, the flux in the experimental channels is twice as strong as that obtained from the source without

Card 2/5

77255, SOV/89-8-2-20/30

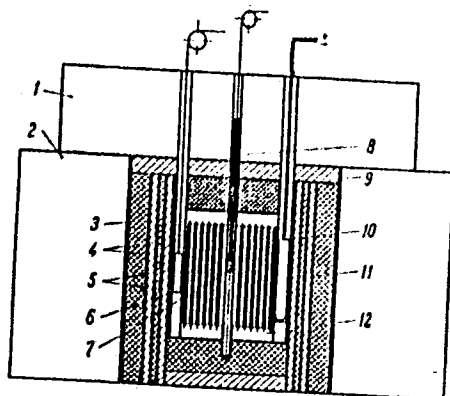


Fig. 2. Construction diagram of the multiplier; (1) top protective tank; (2) lateral protective tank; (3) layer of boron carbide; (4) iron layers; (5) layers of paraffin with boron carbide; (6) sample under investigation; (7) neutron source; (8) regulator rods; (9) iron layer; (10) heat generating element; (11) ionization chamber; (12) moderator-water.

Card 3/5

A-Mobile-Neutron-Multiplier. Letter to
the Editor

77255
SOV/89-8-2-20/30

the multiplier. The power level is fixed by means of two ionization chambers located in the reflector and connected via linear amplifiers to the galvanometer circuit. None of the portable components is heavier than 80 kgm. Field measurements performed during October 1958 showed that the new device is very convenient for activation analysis of geological samples containing V, In, Cl, Mn, Al, Si, Na, K, Co, and other elements. The unit is safe in operation and does not require specially trained personnel. There are 3 figures.

SUBMITTED: July 17, 1959

Card 4/5

77255, SOV/89-8-2-20/30

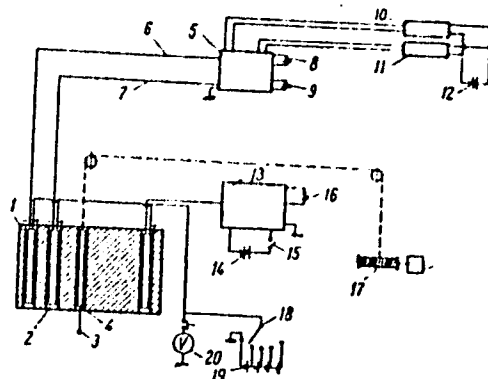


Fig. 3. Control scheme of the multiplier: (1) active region; (2) ionization chambers; (3) neutron source; (4) regulator rods; (5) two-channel d-c amplifier; (6) first cable inlet; (7) second cable inlet; (8) channel battery; (9) anode battery; (10) galvanometer Nr 1; (11) galvanometer Nr 2; (12) illumination battery; (13) signaling arrangement; (14) power battery for signaling arrangement; (15) main tumbler switch; (16) check switch; (17) reducer; (18) change-over switch for chamber battery; (19) chamber battery; (20) voltmeter.

Card 5/5

S/169/62/000/012/033/095
D228/D307

AUTHOR: Lopovok, T.A.

TITLE: Neutron breeder for the activation analysis of geological samples

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1962, 49, abstract 12A392 (In collection: Yadern. geofiz. pri poiskakh polezn. iskopayemykh, M., Gostoptekhizdat, 1960, 174-180)

TEXT: The neutron breeder is a miniature transportable uranium-water heterogeneous system, mounted on a 3AC-151 (ZIS-151) automobile. The system is subcritical (maximum multiplication factor of 0.997). An initial multipliable current of neutrons is given by a Po-Be source with a power of 5-10 neutrons/sec. Distilled water is used as a fission neutron moderator, a coolant, and reflector material. The height and the diameter of the active breeder zone are equal to 45 and 42 cm respectively. The fuel elements contain uranium, enriched by up to 10% of the isotope U235. The breed-

Card 1/2

Neutron breeder ...

S/169/62/000/012/033/095
D228/D307

er fuelling is 2.5 kg (with respect to the isotope U²³⁵). The breeder possesses 5 vertical channels, which have a diameter of 52 mm and are located in the reflector. These channels allow experiments on different energies of neutrons to be conducted simultaneously; one channel has a fast neutron converter, while another has a cadmium shield. The total effective volume of the experimental channels is 2 l, the flux in them being $3-4 \cdot 10^6$ neutrons/cm².sec. The breeder power is controlled by simultaneously moving a rod-regulator full of boron carbide and the Po-Be source suspended in its lower part. Provision is made for the possibility of dismantling and assembling the breeder under field conditions; to ensure this, the breeder is made up of parts weighing no more than 80 kg. A table of the main parameters of the neutron breeder is given. ✓

[Abstracter's note: Complete translation]

Card 2/2

LOPOVOK, T. H.

~~ATY SHEV G. D.~~

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurazulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Ivashev; G. S. Ikramova; A. Ye. Kiv; Ye. H. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Nishanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

Card 1/20

176

Transactions of the Tashkent (Cont.)

SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Card 2/20

174

Transactions of the Tashkent (Cont.)

SOV/5410

instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION
IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan

7

Taksar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes

9

Card 3/20

Transactions of the Tashkent (Cont.)

SOV/5410

Pertshevskiy, Ye. S., and N. D. Lerman [Vsesoyuznyy nauchno-issledovatel'skiy institut zerna - All-Union Scientific Research Institute of Grain]. Gamma-Ray Level Gages for Flour Mills and Combined Fodder Plants.

262

Abramson, I. G., and L. Z. Nemannan [Gosudarstvennyy institut po proyektirovaniyu predpriyatiy tsementnoy promyshlennosti i nauchno-issledovatel'skim i eksperimental'nyy rabotam v oblasti proizvodstva tsementa - State Institute for the Design and Planning of Establishments of the Cement Industry and Scientific Research and Experimental Work in the Field of Cement Production]. A Possible Continuous Remote Control of Slime Level in Slime Pits by Means of a Gamma-Relay System

266

Ieypunskaya, D. I., R. A. Rezvanov, and V. I. Drynkin [Institute of Geology and Production of Mineral Fuels AS USSR]. Application of Neutron Activation Analysis in Geology

269

Lopovok, T. A. [Institute of Geology and Production of Mineral Fuels AS USSR]. Neutron Breeder for Activation Analysis
Card 13/20

18

Transactions of the Tashkent (Cont.)	SOV/5410
of Geological Specimens	277
Abdullayev, A. S., S. A. Bibinov, Ye. M. Lobanov, A. P. Novikov, and A. A. Khaydarov [Institute of Nuclear Physics AS UzSSR]. Express Determination of Lead Percentage in Concentrates	282
Zerobolinskii, B. G., D. P. Respalov, L. N. Bondarenko, L. R. Voltsik, N. V. Popov, A. I. Khaustov, Yu. S. Shinelevich, A. S. Bulin [Institute of Geology and Production of Mineral Fuels AS USSR]. Results of the First Industrial Tests of a Neutron Generator in Oil Wells	285
Flakein, I. N., V. N. Smirnov, and L. P. Starchik [Institut gornogo dela AN SSSR - Mining Institute AS USSR]. Use of Alpha-Radiation of Po^{210} for the Quantitative Control of En- richment Productions Containing Beryllium, Boron, Fluorine, and Aluminum	293
Srapenyants, R. A., and B. B. Nefedov [Vsesoyuznyy n.-i. insti- tut mekhanizatsii sel'skogo khozyaystva - All Union Scientific Card 14/20	

CIA-RDP86-00513R0009305200

S/115/60/000/05/05/034
B007/B011

AUTHOR: Lopovok, T. S.

TITLE: ¹⁴Instrument for Checking the Waviness and the Deviations From
the Precise Geometrical Form

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 5, pp. 9-10

TEXT: A description is given here of the instrument worked out by the
Moskovskiy stankoinstrumental'nyy institut (Moscow Institute of Instrument
Construction) at the Byuro vzaimosamenyayemosti (Bureau for Interchangeable
Manufacturing) for the control of waviness and shape of cylindrical work-
pieces having a length of from 70 to 700 mm and a diameter of from
10 to 70 mm. The measurements can be made by a motor or by hand. The
scheme of this instrument is shown in Fig. 1 and described. Figs. 2 and
3 illustrate the patterns taken by the instrument with a 5,000-fold
vertical magnification. Preliminary investigations showed that the instru-
ment is stable and offers high accuracy. The instrument has 4 steps of
vertical magnification; 500-, 1,000-, 2,000-, and 5,000-fold. Magnifica-
tion in the horizontal direction fluctuates between about 1.15-fold and

Card 1/2

Instrument for Checking the Waviness and the
Deviations From the Precise Geometrical Form

S/115/60/000/05/05/034
B007/B011

8-fold. The range of the measured heights of unevenness is between
 0.2μ and 400μ . There are 3 figures.

✓

Card 2/2

LOPOVOK T.S.

Instrument for controlling the waviness and deviations from the
regular geometrical shape. Izm.tekh. no.5:9-10 My '60. (MIRA 14:5)
(Electric instruments)

LOPOVOK, T.S.

Measuring macroscopic deviations of external surfaces of
cylindrical parts. Izv.tekh. no.8:24-26 Ag '62.

(MIRA 16:4)
(Surfaces (Technology)—Measurements)

LOPOYAN, G. S.

PA 42/49T26

USSR/Engineering
Engines, Diesel

Feb 49

"Two-Cycle Diesels 6D-30/50 of the 'Russkiy Diesel' Works," G. S. Lopoyan, Glavenergoneft, 2 pp

"Energet Byul" No 2

Subject Diesel is a noncompressor vertical type with a piston blowout pump and an air compressor. Gives head-on and side sketch of the assembly, and basic performance and characteristics. Engine is started by compressed air. At present, factory is recommending changes which will increase the 600 hp to 700 hp.

42/49T26

LOPOYAN, G. S.

36086 Peredvishnaya elektrostantsiya s dvigatелем MD-40. Energet byulleten', 1949.
No. 10, S. 1-4.

SO: Letopis' Zhurnal' nykh Statey, No. 49, 1949

LOPOYAN. G.S.

"Short Announcement Concerning a Mobile Standardized Power Unit with a Power Rating of 28 Kilowatts," (Information by the Energeticheskii Bulletin of the Ministry of Oil Industry, No 2, 1952 by G.S. Lopoyan...
SO:Electricity, No 9, 1952 pp 85-

LOPOYAN, G.S.

Diesel Motor

Changing the Diesel engine V2-300 to natural gas fuel. Energ. biul., No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress October 1952. Unclassified

1. LOPOYAN, G. S.
2. USSR (600)
4. Diesel Motor
7. Experience with the periodic regenerative of lubricating oil in diesel engines. Energ. biul., no. 10, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. LOFOYAN, G. G.
2. USSR (600)
4. Electric Power Plants
7. Mobile electric power plant of 24 kilowatt capacity. Ener. biull no. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

LOPOYAN, G. S.

USSR/Electricity - Power Stations

Jun 53

"Portable 24-KW Electric Power Station"

Elektrichestvo, No 6, p 73

Summarizes ^①G.S. Lopoyan's article on above subject (Energ Byull, No 11, 1952). Describes portable 24-kw power sta, manufd by Moscow Electromech Plant of Glavenergoneft', utilizing KD-35 diesel engine (37 hp at 1,400 rpm) and MSA-73/4A generator (30kva at 1,500 rpm; 400/230 v at 50 cps). Includes sketch of side view.

268T57

LOPOYAN, G. S.

G. S. Lopoyan and A. A. Ravkind

"Fixed Internal Combustion Motors in Oil Industry," published by the Scientific and Technical State Publishing House for Literature on Petroleum and Mine-Extracted Fuel in Moscow in 1954. A translation of the table of contents and a brief summary of the context follows:

Table of Contents

Foreward	3
Chapter I. Internal Combustion Motors in Stationary Equipment	6
Chapter II. Reconditioning of Fixed Motors	70
Chapter III. Adjustment of Fixed Motors	92
Chapter IV. Testing	106
Chapter V. Critical Numbers of Revolutions	124
Chapter VI. Transport and Low-Power Motors	200
Appendix: Defects in Motors and Methods of Eliminating Them	216
Bibliography	221

The book gives a description of the most generally used internal combustion motors with compression ignition for stationary equipment and drilling in oil industry. The practical problems of operating, maintenance, adjustment, controlling and testing are analyzed. The characteristics of the motors are given. The book also gives a brief description of movable low-power electric plants, equipped with internal combustion motors with all the necessary information on fuel, oil and water used for the motors.

LOPOYAN, G. S.

AID P - 2353

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 17/30

Author : Lopoyan, G. S., Kand. of Tech. Sci.

Title : Mobile electric power stations of SAE-200 and E-14 types

Periodical : Elektrichestvo, 5, 66-67, My 1955

Abstract : The author describes details of 2 types of mobile electric power stations designed by the Moscow Electromechanical Plant of the Ministry of the Petroleum Industry and by the Lukinskiy Machine-building Plant of the Ministry of the Forest Industry. Both types are driven by 300-hp motors and operate 200-kw generators. They are used mostly in the lumbering industry.

Institution: None

Submitted : Ag 25, 1954

Subject : USSR/Engineering AID P - 3984

Card 1/2 Pub. 28 - 2/11

Author : Lopayan, G. S.

Title : ~~The SAM-600~~ Drilling Pump Unit powered by the M-600 diesel.

Periodical : Energ. byul., 12, 7-9, D 1955

Abstract : In turbine drilling the efficiency of the turbine drill depends mostly on the amount of water brought into the stope. To increase the speed of drilling, the Tatarskaya ASSR Petroleum Association since 1954 has been experimenting with triple installations of the U8-3 pump, which in turn requires an increased driving power. The State Institute for Design of Machinery for the Petroleum Industry (Giproneftemash) and the "Borets" plant have designed the SAM-600 drilling pumps (aggregate of three U8-3 pumps) powered by the M-600 diesel with an increased

AID P - 3984

Energ. byul., 12, 7-9, D 1955

Card 2/2 Pub. 28 - 2/11

power output (obtained by increasing the rpm's from the regular 1,100 to 1,300, which boosted horse power to 600). The author provides data on dimensions and performance of the new outfit, its tests in sinking wells number 312 and 721 (the latter is 1,673 m deep), and its further successful use.

Institutions: As above

Submitted : No date

LOPOYAN, G.S., inshener.

Repairing a broken diesel crankshaft. Energetik 4 no.8:20-21
Ag '56. (MLRA 9:10)
(Crank and crankshafts--Repairing)

LOPOYAN, G.S.

Operation of V2-300 engines. Energ.biul. no.5:25-29 My '56.
(MLBA 9:8)

(Diesel engines)

(Oil well drilling--Equipment and supplies)

LOPOYAN, G.S., inzhener-mekhanik.

Mechanisation of auxiliary operations in drilling stations.
Neftianik 2 no.7:25-26 J1 '57. (MLRA 10:8)
(Cranes, derricks, etc.)

LOPOYAN, G.S.

90-58-5-8/10

AUTHOR: Lopoyan, G.S.

TITLE: Experience in the Operation of Power Units SA-700 With Motors M601 in Oil Fields (Opyt ekspluatatsii silovykh agregatov SA-700 s dvigatelyami M601 na neftyanykh promyshlakh)

PERIODICAL: Energeticheskiy Byulleten', 1958, Nr 5, pp 25-28 (USSR)

ABSTRACT: The power unit SA-700, with the high-speed motors M601 has been used in the oil industry of the USSR since the end of 1956. The motor has 700 hp and 1,500 rpm. Its dimensions and weight are given in a table. The power units were originally designed to operate the drilling pumps U8-3. Now they are also used as drives for various generators. Many of the M601 motors have been in operation for 3,000 hrs. Generally their work is satisfactory, but there are several drawbacks. The control and measuring devices get out of order, caused by vibrations of the frame. The measuring devices of the compressor AK2-150 have to be repaired after 100-150 hours of operation. The use of shock absorbers is recommended. The oil of the engine must be heated to 45° C during starting and the water to 50 to 55° C. At an air temperature of -2 to -3° C, heating takes

Card 1/3

90-58-5-8/10

Experience in the Operation of Power Units SA-700 With Motors M601 in Oil Fields

an hour. It is recommended that a thermostat be installed which switches off the cooling water to the radiator during starting, and on when the engine is warm. The circuit in Figure 1 is proposed as a temporary device. For cleaning the oil filters, it is necessary to stop the motor every day for 2-3 hours. Therefore installation of parallel operating filters which can be cleaned without stopping the engine, is a necessity. The air system of the engine is heated during operation and leaks air. A new construction of the system is proposed in Figure 2. The compressors, the electromotors, etc of the air system are installed on a block-frame. It has been found that the electro-contact manometer system of the compressor does not work properly. This manometer is supposed to switch the electromotor on and off automatically in order to keep the air pressure between 75 - 150 kg/cm². But the manometer falls to switch on even if the pressure falls below 75. The cooling system of the compressors does not cool satisfactorily. Even during the cold season, cooling water has

Card 2/3

90-58-5-8/10

Experience in the Operation of Power Units SA-700 With Motors M601 in
Oil Fields

to be replaced every half hour. The reducers (R-154)
often get out of order and make too much noise. Another
form of gear for the reducers is recommended. The radi-
ator consists of 3 sections mounted one above the other.
Breakdown of one section makes the whole radiator useless.
Another arrangement of the sections is recommended.
There are 2 figures, and 1 table.

AVAILABLE: Library of Congress

Card 3/3

1. Auxiliary power plants-Applications
2. Auxiliary power plants-
Performance
3. Petroleum-Production equipment

BIKCHENTAY, R.N.; LOPOYAN, G.S.; PORSHAKOV, B.P.

[Use of gas turbine systems in industry] Primenenie gazoturbinykh ustanovok v promyshlennosti. Moskva, Gosinti, 1959. 147 p.
(MIRA 15:1)

(Gas turbines)

(Industrial equipment)

14(5)

PHASE I BOOK EXPLOITATION

SOV/2989

Lopoyan, Grach'ya Setrakovich

Dizelist burovykh silovykh ustanovok (Diesel Operator of a Drilling Rig Power Unit) Leningrad, Gostoptekhizdat, 1959. 202 p. 4,700 copies printed.

Ed.: G. Ye. Shevtsov; Tech. Ed.: I. M. Gennad'yeva; Executive Ed.: G. A. Dayev.

PURPOSE: This textbook is intended for diesel operators in the petroleum industry.

COVERAGE: This book describes the operation of diesels used for driving rig drilling tools. Various diesel engine systems used in the Soviet Union for drilling are enumerated, analyzed, and illustrated. Diesel engine operation and the designation of component parts are outlined. The lubricating, cooling, and fuel supplying systems are dealt with in detail. Suggestions are made on the operation and maintenance of diesel engines and auxiliary drilling rig equipment. Major troubles during engine operation are indicated, and recommendations are made on their elimination. Refitting diesels to operate on natural gas is explained. Technical specifications and design of equipment are included. No personalities are mentioned. No references are given.

Card 1/4

Diesel Operator (Cont.)

807/2989

TABLE OF CONTENTS:

Introduction

3

Ch. I. Operation of Internal Combustion Engines

5

Four-stroke diesel engines

11

Two-stroke diesel engines

13

Ways to form a mixture in a diesel and diesel fuel ignition

15

Review questions

Ch. II. Engines Used in Drilling

16

Engine V2-300

33

Engine M601

56

Engine 8S23CR (Skoda)

65

Engine 6Ch-12/14 (K-153)

72

Engine KDM-46

80

Engine D-54

94

Review questions

Ch. III. Refitting Diesels to Operate on Natural Gas or Oil Well Gas
Refitting the V2-300 engine to operate on gas on a gas-diesel
cycle

96

Card 2/4

Diesel Operator (Cont.)

807/2989

Refitting the V2-300 engine to operate on gas with electric spark ignition	103
Refitting the 8S230R (Shkoda) engine to operate on gas	105
Refitting the Worthington engine to operate on gas	106
Refitting diesel engine 4Ch-42,5/60, built by the "Dvigatel' Revolyutsii" plant, to operate on gas	109
Review questions	109
 Ch. IV. Operating Internal Combustion Engines in Drilling	
Practical experience of leading specialists	110
Fuel, oil, and water to be used in engines	112
Starting the engine, handling it during the operation, and stopping engine operation	124
Most frequent troubles during engine operation, their causes, and elimination	133
Engine technical maintenance	137
Carrying out technical maintenance operations	141
Review questions	152
 Ch. V. Drilling Rigs and Their Diesel Power Units	
 Card 3/4	

Diesel Operator (Cont.)

SOV/2989

Drilling rigs and power units equipped with engines V2-300A and V2-400A	153
Drilling rig diesel units equipped with engines M601 and M620	164
Drilling rig power units used for structural, exploratory, and wild cat drilling	171
Auxiliary power equipment of a drilling rig and its operation	175
Assembling and operating power units and their auxiliary equipment	187
Review questions	196
Ch. VI. Safety Techniques and Fire Prevention Measures	
Safety techniques and protection of workmen	197

AVAILABLE: Library of Congress

Card 4/4

TM/os
2/1/60

EMINOV, Ye.A.; OSHER, R.N.; PATSUKOV, I.P.; CHEKAVTSEV, N.A.; MAZYRIN, I.V.;
FUKS, G.I.; VLADZIYEVSKIY, A.P.; PATSUKOV, I.P.; AVDEYEV, A.V.;
~~LOPOVAN, G.S.~~; PETROV, G.G.; KOZOREZOVA, A.A.; LISITSKIY, K.Z.;
YAKOBI, M.A.; BELYANCHIKOV, G.P.; IVANOV, V.S.; VORONOV, H.M.; RU-
MYANTSEV, V.A.; ZILLER, G.K.; BEREZHNYAYA, V.D.; LEVINA, Ye.S.,
vedushchiy red.; TROFIMOV, A.V., tekhn.red.

[Manual on the uses and consumption standards of lubricants] Spra-
vochnik po primeneniyu i normam raskhoda smazochnykh materialov.
Moskva, Gos.nauchno-tekhn.isd-vo neft. i gorno-toplivnoi lit-ry,
1960. 703 p. (MIRA 13:4)
(Lubrication and lubricants)

LOPOYAN, Grach'ya Setrakovich, inzh. stroitel'stva; LOSHAK, V.,
red.

[Great pipeline] Velikaia magistral'. Sverdlovsk, Sredne-
Ural'skoe knizhnoe izd-vo, 1964. 43 p. (MIRA 18:3)

TYRTYY-OOL, Yu., uchenik 10 klassa; ~~LOPSANCHAP, O.Ch.~~, chaban, Geroy
Sotsialisticheskogo Truda; KYRGYS, S.B., chaban; YURTAYEV, I.S.;
FEDOSEYENKO, N.A., kukuruzovod

We shall put into practice the resolutions of the January Plenum
of the Central Committee of the CPSU. Uch.zap.Tuv.nauch.-
issl.inst.iaz.lit.i ist. no.9:14-29 '61. (MIRA 15:5)

1. Turanskaya srednyaya shkola (for Tyrtyy-ool).
 2. Kolkhoz "30 let
Oktyabrya", Dzun-Khemchikskogo rayona (for Lopsanchap).
 3. Kholkhoz
"Torgalyg" Ovyurskogo rayona (for Krygys).
 4. Direktor sovkhoza
"Krasnyy partizan" (for Yurtayev).
- (Tuva A.S.S.R.—Agriculture)

LOPUSHIN, L. N.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Stekol'nikov, I. S.	"Lighting Protection of	Power Engineering Institute
Komel'kov, V. S.	Industrial Structures and	imeni G. M. Khrizhkanovskiy,
Bogomolov, A. F.	Buildings"	Academy of Sciences USSR
Likhachev, F. A.		
Borisov, V. N.		
<u>Lopshin, L. N.</u>		

SO: W-30604, 7 July 1954

LOPSHITS, AM M.

Integrazione tensoriale in una varietà riemanniana a due dimensioni. Trudy
semin. P. vektorn. I tenzorn. Analizu, 2-3 (1935), 200-211.

SO; Mathematics in the USSR, 1917-1947

Edited by Kurosh, A.G.

Markushevich, A.I.

Rashevskiy, P.K.

Moscow-Leningrad, 1948

LOPSHITS, A.M.
KARMAN, Theodor, von, 1881- ; SHESTOPAL, M.O. [translator]; LOPSHITS, A.M.,
redaktor

[Mathematical methods in engineering. Translated from the English]
Matematicheskie metody v inzhenernom dele. Perevod s angliiskogo
M.O.Shestopal. Pod redaktsiei A.M.Lopshitsa. Moskva, Gos. Izd-vo
tekhniko-teoretich. lit-ry, 1946. 422 p. (MIRA 10:10)
(Engineering) (Dynamics) (Differential equations)

LOPSHITS, A. M.

Analytic geometry. Moskva, Gos. uchebnoyedagog. 1zd.vo, 1948. 575 p. (50-55891)
QA551.L83

LOPSIC, A. M.

Mathematical Reviews
Vol. 15 No. 4
Apr. 1954
Algebra

8-24-54
LL

Lopsh, A. M. Some problems of tensor algebra in linear
~~dimensional spaces~~ Trudy Sem. Vektor. Tenzor.
Analizu 6, 365-419 (1948). (Russian)

This paper develops the algebra of tensors (multilinear algebra, complex field) without introducing the concept of the number of dimensions of the space, and consequently without the use of coordinates or the ordinary index notation.

Conditions of divisibility, simplicity, and complanarity for bilinear skew-symmetric scalar and vector functions (in index terms, tensors of valence 2 and 3, skew-symmetric in two indices) are derived, including a number of new special results. For example: Given two simple bilinear, skew-symmetric vector functions R and S , with R not completely simple (R is simple if there exist a linear vector function A and a scalar vector function ϕ so that $Rxy = Ax\phi y$, completely simple if in addition a constant vector a and a scalar function ψ exist so that $Ax = a\psi x$) a necessary and sufficient condition that they have a common vector function factor is that $\underline{SxyRsuRtw} = 0$, where the two underscorings indicate separate alternations on the corresponding variables.

L. C. Hutchinson (Boston, Mass.).

LOPŠIĆ, A. M.

Mathematical Reviews
Vol. 14 No. 11
Dec. 1953
Numerical and Graphical
Methods

✓ Lopšić, A. M. An extremal theorem for a hyperellipsoid and its application to the solution of a system of linear algebraic equations. *Trudy Sm. Vektor. Tenzor. Analizu* 9, 183-197 (1952). (Russian)

Let A be a symmetric positive definite affnor [=matrix] whose largest and least proper values are M and m . Let ϕ be the angle made by the radius vector r at the point P of the hyperellipsoid $rAr=1$ with the "principal normal plane" at P —i.e., with the subspace spanned by the vectors Ar, A^2r, \dots, A^kr . Let $T_k(x)$ be the Čebyšev polynomial, with $T_k(1)=1$. Theorem: Always $\sin \phi \leq [T_k(\delta)]^{-1}$, where $\delta = (M+m)(M-m)^{-1}$. The proof, which is expressed in terms of multivectors, is long.

The theorem is used to estimate the convergence of a proposed class of gradient methods of solving a linear system $Ax=a$: Let $x_0=0, a_0=a$. Given x_i and $a_i=a-Ax_i$, let $x_{i+1}-x_i$ be so chosen in the k -dimensional ($k \geq 1$) space Π_i spanned by $a_i, Aa_i, \dots, A^{k-1}a_i$ that $|Ax_{i+1}-a|$ is minimized. It is shown that $|a_{i+1}| \leq |a_i| \sin \phi_i$, where ϕ_i is the angle made by a_i with the plane $A\Pi_i$.

For $k=1$ the author's method is the "1-process" described also by Krasnosel'skii and Krein [*Mat. Sbornik* N.S. 51(73), 315-334 (1952); these Rev. 14, 692, q. v.]. The author states that the 1-process requires one multiplication of A by a vector per step, whereas the related "0-process" of Kantorovič and others takes two. [The reviewer

The reviewer suspects the theorem could be proved briefly and elegantly following the Birman paper cited by the author [*Uspehi Matem. Nauk* (N.S.) 5, no. 3(37), 152-155 (1950); these Rev. 12, 32; 14, 412].

G. E. Forsythe (Los Angeles, Calif.)

LOPSHIK, A. M.

Mathematical Reviews
Vol. 14 No. 8
Sept. 1953
Geometry.

Lopšic, A. M. An algebraic problem of the theory of Riemannian spaces of the first class. *Trudy Semin. Vektor. Tenzor. Analiza* 9, 342-350 (1952). (Russian)
The paper is concerned with the necessary and sufficient algebraic conditions that the tensor K_{ijkl} of a V_n must satisfy in order to be the curvature tensor of a hyper surface of a euclidean E_{n+1} . The problem is one of existence of a symmetric solution for n of $K_{ijkl} = a_{ij}a_{kl} - a_{il}a_{jk}$. The results are not new, but are more completely stated in terms of multilinear forms whose coefficients are the components of the curvature tensor and its various contractions.
M. S. Kechelava (Pulten, W. Va.)

LOPSHITS, A.M.

Algebraic problem in the theory of Riemann spaces of class one.
Trudy Sem.po vekt.i tens.anal. no.9:462-490 '55. (MLRA 8:8)
(Spaces, Generalized)

LOPSHITS, A.M. (Yaroslavl')

Some aspects of null-dimensional geometry. Uch.zap.Kaz.un. 115
no.10:18 '55. (MLRA 10:5)

(Geometry)

LOPSHITS, Abram Mironovich; RAZUMOVSKAYA, A.P., redaktor; AKHLAMOV, S.N.,
tekhnicheskii redaktor

[Calculating the area of oriented figures] Vychislenie ploshchadei
orientirovannykh figur. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry,
1956. 58 p. (Populiarnye lektsii po matematike, no.20) (MIRA 9:8)
(Area measurement)

SANTALO, L.A.; SHESTOPAL, M.G. [translator]; LOPSHITS, A.M., redaktor;
YAGLOM, I.M., redaktor; AGRANOVICH, M.S., redaktor; GRIBOVA, M.P.,
tekhnicheskii redaktor

[Introduction to integral geometry. Translated from the English]
Vvedenie v integral'nuiu geometriiu. Perevod s angliiskogo M.G.
Shestopal. Pod red. A.M.Lopshitsa i I.M.Iagloma. S dop. I.M.
Iagloma. Moskva, Izd-vo inostrannoi lit-ry, 1956. 183 p.
(Geometry, Differential) (MLRA 10:1)

SOV/44-58-4-3199

Translation from: Referativnyy zhurnal, Matematika, 1958,
Nr 4, p 121 (USSR)

AUTHOR: Lopshits, A.M.

TITLE: Certain Problems of Projective, Affine, and Descriptive
Geometry in Dimensionless Space (Nekotoryye voprosy
proyektivnoy, affinnoy, i nachertatel'noy geometrii v
bezrazmernom prostranstve)

PERIODICAL: Tr. 3-go Vses. matem. s"yezda, Nr 2, Moscow, AN SSSR,
1956, 140

ABSTRACT: Dimensionless projective space is compared with a dimensionless space of pseudovectors (Lopshits, A.M., Tr. Seminara po vektorn. i tenzorn. analizu, Nr 6, 1948). Its fundamental group is determined by a nondegenerating affinor. Determining the affine and metric subgroup, the author formulates theorems analogous to the basic theorem of central axonometry of Beskin and the theorem of Pohlke-Schwarz.

A.P. Norden

Card 1/1

LOPSHITS, A.M.

DUBNOV, Ya.S.; LOPSHITS, A.M.

~~Veniamin Fedorovich Kagan~~ [by Ia.S. Dubnov, A.M. Lopshtits]. Trudy
Sem. po vekt.i tenz.anal. no.10:3-14 '56. (MLRA 10:3)
(Kagan, Veniamin Fedorovich, 1869-1953)

LOPSHITS, A.M. (Moscow)

Expanding proper rational fractions into simplest fraction and
Hermite's interpolation problem. Mat. pros. no.1:169-176 '57.
(MIRA 11:7)

(Fractions) (Interpolation)

LOPSHITS, A.M. (Moscow)

Teaching the theory of determinants. Mat. pros.no.2:51-80 '57.

(MIRA 11:7)

(Determinants)

LOPSHITS, A.M. (Moskva)

Area theory of oriented polygons (in an affine plane). Mat.
pros. no.3:183-193 '58. (MIRA 11:9)
(Polygons)

GAL'PERN, S.A. (Moskva); LOPSHITS, A.M. (Moskva); BALK, M.B. (Smolensk);
ZHAROV, V.A. (Yaroslavl'); BYAKIN, V.I. (L'vov); ARJOL'D, V.I.
(Moskva); MANIN, I.Yu. (Moskva); DYNKIN, Ye.B. (Moskva); PROIZ-
VOLOV, V. (Moskva); ALEKSANDROV, A.D. (Leningrad); VITUSHKIN, A.G.
(Moskva).

Problems of elementary mathematics. Mat. pros. no.3:267-270 '58.
(Mathematics--Problems, exercises, etc.) (MIRA 11:9)

ZALGALLER, S.I. (Leningrad); SKOPETS, Z.A. (Yaroslavl'); ROZE-BRISTOV, F.S.
(Khar'kov); LANDIS, Ye.M. (Moskva); LEVIN, V.I. (Moskva); STECHKIN,
S.B. (Moskva); LYAPUNOV, A.A. (Moskva); ARNOL'D, V.I. (Moskva);
LOPSHITS, A.M. (Moskva)

Problems of higher mathematics. Mat.pros. no.3:270-274 '58.
(MIRA 11:9)
(Mathematics--Problems, exercises, etc.)

LOPSTHIT, ~~1/2~~

16(1)
 Vsesoyuzny matematicheskiy s'ezd. 3rd, Moscow, 1956
 Trudy. t. 4: Kratkoye soobsheniye sektsionnykh dokladov. Doklady
 Inostrannykh uchenykh (Translations of the 3rd All-Union Mathemat-
 ical Conference in Moscow. Vol. 4: Summary of Sections Reports,
 Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959.
 247 p. 2,200 copies printed.
 Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy Institut.
 Tech. Ed.: G.M. Shcherbakov; Editorial Board: A.A. Abramov, V.O.
 Molyshev, A.M. Vasil'yev, B.V. Medvedev, A.D. Ryabkii, S.M.
 Krasovskiy (Resp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, K.A.
 Smirnov, P. L. Ulyanov, V.A. Uspenskiy, M.O. Chetayev, O. Ye.
 Shilov, and A.I. Smirnov.

PURPOSE: This book is intended for mathematicians and physicists.
 COVERAGE: The book is Volume IV of the Transactions of the Third All-
 Union Mathematical Conference, held in June and July 1956. The
 book is divided into two main parts. The first part contains a se-
 ries of the papers presented by Soviet scientists at the Con-
 ference that contains the text of reports submitted to the editor
 by Soviet scientists. In those cases where the non-Soviet sci-
 entist did not submit a copy of his paper to the editor, the title
 of the paper is cited and, if the paper was printed in a previous
 volume, reference is made to the appropriate volume. The papers,
 both Soviet and non-Soviet, cover a wide range of topics in number theory,
 algebra, differential and integral equations, function theory,
 functional analysis, probability theory, topology, mathematical
 problems of mechanics and physics, computational mathematics,
 mathematical logic and the foundations of mathematics, and the
 history of mathematics.

73
 -Brahm, S.S. (Moscow). The invariance of infinite dimen-
 sional homology groups
 Section on Geometry
 -Bryl'ev, G.L. (L'viv). On certain problems of geometry 75
 connected with accuracy of graphic computations
 -Gur'davskiy, P.Z. (Kharkov). Incidence axioms of multidimen- 75
 sional projective geometry
 -Kurdan, A.G. (Sverdlovsk). Certain problems of local de- 76
 terminability of surfaces
 -Krasovskiy, A.Ye. (Yerevan). Linear complexes of developing 76
 surfaces of a congruence
 -Koshits, A.M. (Moscow). Fundamentals theorem of the theory 77
 of hyperparaboloids in dimensionless Euclidean space
 Card 15/ 34

LOPSHITS, A.I.

Do not exclude the axio-logic-method ideas from school. Mat. prog.
no. 4:151-152 '95. (11B 13:11)
(Mathematics--Study and teaching)

LOPSHITS, A.M. (Moskva)

Unique collection of problems, Mat.pros. no.4:301-308 '50.

(NIM 14:11)

(Mathematics--Problems, exercises, etc.)

ZAGUSKIN, Vladimir L'vovich; LOPSHITS, A.M., red.; VARPAKHOVSKIY, F.L.,
red.; MURASHOVA, M.Ya., tekhn.red.

[Handbook of numerical methods for solving algebraic and
transcendental equations] Spravochnik po chislennym metodam
resheniya algebraicheskikh i transtsendentnykh uravnenii.
Pod red. A.M.Lopshitsa. Moskva, Gos.izd-vo fiziko-matem.
lit-ry, 1960. 216 p. (MIRA 13:4)
(Equations--Numerical solutions)

LOPSHITS, A.M. (Moskva)

Iakov Semenovich Dubnov — the scientist, pedagogue, and man.
Mat. pros. no.5:3-16 '60. (MIRA 13:12)
(Dubnov, Iakov Semenovich, 1887-)

LOPSHITS, A.M. (Moskva)

Distributive characteristic of multiplication in vector algebra.
Mat. pros. no.5:202-204 '60. (MIRA 13:12)
(Algebra, Universal)

KAGAN, Veniamin Fedorovich [1869-1953]; SHESTOPAL, G.A. [translator]; BRON-SHTEYN, I.N. [translator]; LOPSHITS, A.M., red.; RASHEVSKIY, P.K., red.; LAPKO, A.F., red.; KRYUCHKOVA, V.N., tekhn. red.

[Subprojective spaces] Subproektivnye prostranstva. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1961. 218 p. (MIRA 14:6)
(Projection) (Spaces, Generalized)

LOPSHITS, A.M.

b-3

PHASE I BOOK EXPLOITATION

SOV/5726

Moscow. Universitet.

Trudy seminara po vektornomu i tenzornomu analizu s ikh prilozheniyami k geometrii, mekhanike i fizike. vyp. 11. (Transactions of the Seminar on Vector and Tensor Analysis With Their Application in Geometry, Mechanics, and Physics. no. 11) [Moscow] 1961. 314 p. 2,500 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

Ed. (Title page): P. K. Rashevskiy, Professor; Ed.: V. A. Gukovskaya; Tech. Ed.: K. S. Chistyakova.

PURPOSE: This book is intended for theoretical physicists, mathematicians, and engineers.

COVERAGE: The book contains reports presented at the Seminar on Vector and Tensor Analysis (Moscow, 1961), includes an annotated

Card 1/5

Transactions of the Seminar (Cont.)

SOV/5726

bibliography of some reports presented at Seminar meetings over the period 1 July 1954 through 31 December 1957, and reviews the life and works of Yakov Semenovich Dubnov (1887-1957), senior member and cofounder (with V. F. Kagan and others) of the Seminar. Professor Dubnov's contributions to mathematics are reviewed in some detail and include his teaching of analytical and differential geometry with the application of vector analysis and works on problems in the algebra of affinors. Dubnov also wrote Osnovy vektornogo ischisleniya (Principles of Vector Calculus). studied the general theory of nets on surfaces, and worked on studies of different types of nets and invariant characteristics of nets on surfaces, the central projective and affine theory of curves and surfaces, and related subjects. A chronological bibliography of his publications is included. The biographical sketch of Professor Dubnov was written by V. V. Vagner and A. M. Lopshits. No personalities are mentioned. References accompany individual articles.

Card 2/5

SOV/5726

Transactions of the Seminar (Cont.)

TABLE OF CONTENTS:

Yakov Semenovitch Dubnov [Deceased]	3
Brief Information on the Activity of the Seminar for the Period From 1 Jul 1954 Through 31 Dec 1957	19
Gurevich, G. B. Semicharacteristic and Characteristic Subalge- bras of a Standard Null Algebra	25
Solodovnikov, A. S. Spaces With General Geodesics	43
Kruchkovich, G. I. One Class of Riemannian Spaces	103
<u>Lopshits, A. M.</u> Solution of a Special System of Differential Equations With Constant Coefficients	129
Shulikovskiy, V. I. Differential-Topological Characteristics of a Family of Nets With Equal Chebyshev Vectors and a General Apolar Net	141

Card 3/5

Transactions of the Seminar (Cont.)	SOV/5726
Rzhekhina, N. F. Theory of Curves in $(n - 1)$ -Dimensional Projective Space	153
Chashechnikov, S. M. Field Theory of Local Improper Hyperbands in X^n	165
Zhotikov, G. I. Theory of Field of Local Surfaces Tangent in a Compound Manifold of the First Order $E_n(X_n)$	189
Kabanov, N. I. Geometrical Theory of Caratheodory Transformations in a Lagrange Problem	211
Abbasov, N. T. Spinor Representations of Motions of Quasi-Noneuclidean spaces	241
Chernyshenko, V. M. Spaces With a Special Complex of Geodesic Lines	253

Card 4/5

Transactions of the Seminar (Cont.)

SOV/5726

Fedishchenko, S. I., and V. M. Chernyshenko. One Generalization
of Spaces of Constant Curvature 269

Kropina, V. K. Projective Two-Dimensional Finsler Spaces With
a Special Metric 277

Solodovnikov, A. S. Models of Elliptical Spaces 293

Neyfel'd, E. G. Problem of the Centroequiaffine Geometry of
Plane Curves of the Third and Fourth Orders 309

Katipov, A. E. - A. The Theory of Surfaces in Space With a
Decomposing Absolute 311

AVAILABLE: Library of Congress

JAN/rsm/ec
11-20-61

Card 5/5

37586
S/044/62/000/004/022/099
C111/C444

163400
AUTHOR: Lopshits, A. M.
TITLE: The solution of a special system of differential equations with constant coefficients
PERIODICAL: Referativnyy zhurnal, Matematika, no. 4, 1962, 33 abstract 4B148. (Tr. Seminara po vektorn. i tenzorn. analizu. Mosk. un-t, 1961, no. 11, 129 - 140)
TEXT: Considered is the system

$$\begin{aligned} (D^m + \alpha_1 D^{m-1} + \dots + \alpha_{m-1} D' + \alpha_m) x(t) = \\ = (\beta_1 D^{m-1} + \beta_2 D^{m-2} + \dots + \beta_{m-1} D + \beta_m) A x(t), \\ D \equiv \frac{d}{dt}, \end{aligned} \quad (1)$$

where $x(t)$ is the searched vector function of the variable t in the n -dimensional space; A is a given constant linear operator. In the article a method is given for the determination of the general solution of (1) which merely uses the characteristic equation (minimal polynomial), and where the transformation of the operator to the Jordan normal form and the determination of the characteristic vectors of the operator are not necessary. In the article one deduces Card 1/2

The solution of a special system...

3/044/62/000/004/022/099
C111/C444

formulas expressing the particular solutions of (1) by the initial conditions for different cases of roots of the characteristic equation. Also for the general solution a formula is obtained. Examples are given. A bibliography with eleven titles.

[Abstracter's note: Complete translation.]

Card 2/2

GEL'FAND, I.M. (Moskva); DYUDENI, N.Ye. (SShA); KIRILLOV, A.A. (Moskva);
 PODSIYANIN, V. (Tula); TER-MKRTACHAN, M. (Yerevan); KUZ'MIN, Yu.I.
 (Moskva); VEYL', G. (SShA); PADDEYEV, D.K. (Leningrad); ARHOL'D,
 V.I. (Moskva); IVANOV, V.F. (San-Karlos, Kaliforniya, SShA);
 GRAYEV, M.I. (Moskva); LEBEDEV, N.A. (Leningrad); LOPSHITS, A.M.
 (Moskva); ZHITOMIRSKIY, Ya.I.; MITYAGIN, B.S. (Moskva); SKOPETS,
 Z.A. (Yaroslavl'); PUANKARE, A. (Frantsiya); GAVEL, V.V. (Brno,
 Chekhoslovakiya); SOLOMYAK, M.Z. (Leningrad); LEVIN, V.I. (Moskva);
 BARBAN, M.B. (Tashkent); FRIDMAN, L.M. (Tula)

Problems. Mat. pros. no.5:253-260 '60.

(MIRA 13:12)

(Mathematics--Problems, exercises, etc.)

VAGNER, V.V.; LOPSHITS, A.M.

Iakov Semenovich Dubnov; obituary. Trudy Sem.po vekt.i tenz.anal.
no.11:3-17 '61. (MIRA 15:3)

(Dubnov, Iakov Semenovich, 1887-1957)

LORSHITS, A.M.

Solution of a special system of differential equations with
constant coefficients. Trudy Sem.po vekt.i tenz.anal. no.11:129.
140 '61. (MIRA 15:3)
(Differential equations) (Vector analysis)

ISAKOV, A.A. (Kemerovskaya oblast'); ZHURGARAYEV, Amangel'dy (Dzhambul'skaya obl., KazSSR); VLADIMIROV, A. (Asbest); FRIMAN, L.I. (Yaroslavl'); KILIMNIK, Ya.Ye. (Vinnitsa); TEREKHOV, I.A. (Skopin); AKDAULETOV, N.A. (pos.Mertuk. KazSSR); ZAKHARKIN, V.Ye. (pos.Rudtsev, Tul'skaya oblast'); SHESTOPAL, G.A. (Moskva); KOTIY, O.A. (Yaroslavl'); GAUKHMAN, V.A. (Moskva); LOPSHITS, A.M. (Yaroslavl'); SERGUSHOV, S.A. (Yaroslavl'); GOTMAN, E.G. (Pechora); VETROV, K.V. (Putintsevo, Vostochno-Kazakhstanskoy obl.); MIKHELEVICH, Sh.Kh. (Daugavpils); SKOPETS, Z.A. (Yaroslavl'); RYERKOV, L.M. (Yaroslavl'); CHEGODAYEV, A.I. (Gavrilov-Yam)

Problems. Mat.v shkole no.6:85-92 N-D '62. (MIRA 16:1)
(Mathematics—Problems, Exercises, etc.)

LOPSHITS, A.M.

Invariant symptom of the solvability of the equation $Ax = a$.
Dokl. na nauch. konf. 1 no.3:99-103 '62. (MIRA 16:8)
(Operators (Mathematics)) (Linear equations)

LOPSHITS, A.M. (Yaroslavl'); VIKSMAN, V.S. (Moskva); KAPANIKOLOV, Khr.
(Sofiya); BERKOLAYKO, S. (Belgorodskaya oblast'); BOKOV, Ye.A.
(Krasnodarskiy kray); GABOVICH, Ya. (Tartu); SKOLITS, Z.A. (Yaroslavl');
RABINOVICH, V.L. (Petrovavlevsk Tselinnogo kraya)

Problems. Mat. v shkole no.4:86 J1-Ag '63. (MIRA 16:9)
(Mathematics--Problems, exercises, etc.)

LOPSHITS, A.M.

Families of lines of force in dimensionless affine space.

Trudy Sem.po vekt.i tenz.anal. no.12:175-201 '63.

(MIRA 16:6)

(Geometry, Differential)

STEKOLNIKOV, I. S.; KOMELKOV, V. A.; BOGOMOLOV, A. F.; LIKHACHEV, P. A.; S. I. LOPSHITS, L. M.

Grozozashita Promyshlennykh Sooruzhenii i Zdani (Lightning Protection of Industrial Structures and Buildings), 202 p., Publ. House of the AS USSR, Moscow, 1951.

LOPSHITS, L.M.

AUTHOR: LOPSHITS, L.M., Engineer 105-7-18/29
 TITLE: A Diagram for Determining the Protective Zones of Rod Gaps.
 (Nomogramma dlya opredeleniya zon zashchity sterzhnevnykh
 molniyeotvodov, Russian)
 PERIODICAL: Elektrichestvo, 1957, Nr 7, pp 76-78 (U.S.S.R.)
 ABSTRACT: The directives at present in force concerning lightning con-
 ductor protection differ from those in force previously by
 the fact that recently a difference in the formulae for comput-
 ing lightning conductors with a height of up to 30 m and more
 was introduced. For this reason the nomogram set up pre-
 viously is valid only in the case of lightning conductors of
 up to 30 m height. Here a nomogram for lightning conductors
 with a height of $h \gg 30$ m is given. It is assumed that the
 distance between lightning conductors is given, which is
 also the case in practice. Examples are given. (With 4 Illu-
 strations and 5 Slavic References).
 ASSOCIATION: Teploelektroproyekt
 PRESENTED BY:
 SUBMITTED: 24.4.1956
 AVAILABLE: Library of Congress
 Card 1/1

KRIKUNCHIK, A.B., inzh.; LOPSHITS, L.M., inzh.; IOGANSO, N.Ye., inzh.; SUMAROKOV, B.P., inzh.; KUDRYASHOV, S.A., inzh.

Distribution system of 6-10 kv. with reactors on the external connectors.
Elek. sta. 29 no.10:79-83 0 58. (MIRA 11:11)

1. Teploelektroproyekt. (for Krikunchik, Lopshits). 2. Promenergoprojekt (for Ioganson, Sumarokov). 3. Knybyshevskoye otdeleniye Elektroproyektov (for Kudryashov).

(Electric power distribution)

LOPSHITS, L.M., inzh.; DVOSKIN, L.I., inzh.

Concerning L.I.Dvoskin's article "Standard designs of an enclosed
35 kv. power distribution device." Elek. sta. 33 no.8:92 Ag
'62. (MIRA 15:8)
(Electric power distribution) (Electric substations)
(Dvoskin, L.I.)

LOPSHITS, L.M., inzh.

Concerning L.I.Dvoskin's reply. Elek.sta. 33 no.12:85 D '62,
(MIRA 16:2)

(Electric cutouts)
(Electric equipment industry)

PETROV, K.M.; DYAKONOV, V.I.; FADEYEV, I.G.; SEMENENKO, P.P.; KRYUKOV, L.G.;
 Primali uchastiye: PASTUKHOV, A.I.; SHISHKINA, N.I.;
 PAZDNIKOVA, T.S.; CHIRKOVA, S.N.; KAREL'SKAYA, T.A.; LOPTEV, A.A.;
 DZEMYAN, S.K.; ISUPOV, V.F.; BELYAKOV, A.I.; GUDOV, V.I.;
 SUKHMAN, L.Ya.; SLESAREV, S.G.; GOLOVANOV, M.M.; GLAGOLENKO, V.V.;
 ISUPOVA, T.A.; ZYABLITSEVA, M.A.; KAMENSKAYA, G.A.; POMUKHIN, M.G.;
 UTKINA, V.A.; MANEVICH, L.G.

Vacuum treatment of alloyed open hearth steel. Stal' 22 no.2:113-
 117 F '62. (MIRA 15:2)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
 (for Pastukhov, Shishkina, Pazdnikova, Chirkova, Karel'skaya,
 Loptev, Dzemyan). 2. Metallurgicheskiy kombinat im. A.K. Serova
 (for Isupov, Belyakov, Gudov, Sukhman, Slesarev, Golovanov,
 Glagolenko, Isupova, Zyablitseva, Kamenskaya). 3. 6-y Gosudar-
 stvennyy podshipnikovyy zavod (for Pomukhin, Utkina, Manevich).
 (Steel--Metallurgy)
 (Vacuum metallurgy)

KLEYN, A.L.; DANILOV, A.M.; Prinimali uchastiye: KOLYASNIKOV, M.P.;
MISBAKHOV, A.K.; ANTROPOVA, N.G.; NESMEYANOV, Ye.V.;
KHARITONOV, Yu.A.; TIMONINA, V.M.; LOPTEV, A.A.;
TSIKAREV, V.G.

Accelerating the assimilation of lime during slag formation
in basic open-hearth furnaces. Stal' 24 no.1:32-34 Ja '64.
(MIRA 17:2)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov i Zlatoustovskiy metallurgicheskiy zavod (for Kleyn,
Danilov).

LOPTEV, L.N., mayor meditsinskoy sluzhby

Character of the course and comparative evaluation of some
methods of treating some respiratory diseases. Voen.-med.
zhur. no.11:71-72 N '61. (MIRA 15:6)
(RESPIRATORY ORGANS—DISEASES)

LOPUK, I.G.; ~~ORLOVA~~, M.P.

Use of petrolatum in the drying and impregnation of materials for
the manufacture of containers. Trudy Military no.2:71-80 '58.

(MIRA 13:12)

(Petrolatum)

(Wood--Preservation)

(Lumber--Drying)

LOPUKH, N.K.

Device for scraping bushings. Stan.1 instr. 31 no.2:43
F '60. (MIRA 13:5)

(Grinding and polishing)